Progress Energy

October 26, 2010

Jocelyn Boyd, Esquire
Chief Clerk and Administrator
South Carolina Public Service Commission
Post Office Drawer 11649
Columbia, South Carolina 29211

Re: Carolina Power & Light Company d/b/a Progress Energy Carolinas, Inc.
Power Plant Performance Report
Docket No. 2006-224-E

Dear Mrs. Boyd:

Enclosed is the Power Plant Performance Report for Carolina Power & Light Company d/b/a Progress Energy Carolinas, Inc. for the month of September 2010.

Sincerely,

Len S. Anthony (by dhs)

Len S. Anthony
General Counsel
Progress Energy Carolinas, Inc.

LSA/dhs
Attachment
45612

c: John Flitter (ORS)

Progress Energy Service Company, LLC
P.O. Box 1551
Raleigh, NC 27602

September 2010

The following units had no off-line outages during the month of September:

Brunswick Unit 1
Brunswick Unit 2
Harris Unit 1
Mayo Unit 1
Roxboro Unit 3
Roxboro Unit 4

September 2010

Robinson Unit 2

Full Forced Outage

A. Duration: The unit was taken out of service at 14:37 on September 9, and was returned to service at 12:31 on September 14, a duration of 117 hours and 54 minutes.

B. Cause: Automatic Turbine and Reactor Trip

C. Explanation: A degraded connection in a circuit board in the electro-hydraulic cabinet caused an erroneous over-temperature/delta temperature indication, causing a close signal to inadvertently be sent to all four turbine governor control valves. Once the governor valve closed, the reactor lost its main heat sink, which initiated an automatic reactor trip.

D. Corrective Action: The defective circuit board was replaced. After testing of the new board was completed, the unit was returned to service.

September 2010

Roxboro Unit 2

Full Forced Outage

A. Duration: The unit was taken out of service at 1:17 on September 11, and was returned to service at 9:11 on September 12, a duration of 31 hours and 54 minutes.

B. Cause: Waterwall Tube Leak

C. Explanation: The unit was taken out of service to investigate and repair a tube leak in the waterwall section of the boiler.

D. Corrective Action: Maintenance activities were conducted to correct the waterwall tube leak. Upon completion of repairs, the unit was returned to service.

	Month of September 2010		Twelve Month Summary		See Notes*
MDC	938	MW	950	MW	1
Period Hours	720	HOURS	8,760	HOURS	
Net Generation	689,081	MWH	6,768,114	MWH	2
Capacity Factor	102.03	%	81.31	%	
Equivalent Availability	100.00	%	81.04	%	
Output Factor	102.03	%	98.98	%	
Heat Rate	10,448	BTU/KWH	10,448	BTU/KWH	

	MWH	% of Possible	MWH	% of Possible	
Full Scheduled	0	0.00	1,382,550	16.61	3
Partial Scheduled	0	0.00	85,221	1.02	4
Full Forced	0	0.00	103,243	1.24	5
Partial Forced	0	0.00	89,676	1.08	6
Economic Dispatch	0	0.00	0	0.00	7
Possible MWH	675,360		8,324,920		8

* See 'Notes for Nuclear Units' filed with the January 2010 report.
** Gross of Power Agency

	Month of September 2010		Twelve Month Summary		See Notes*
MDC	920	MW	931	MW	1
Period Hours	720	HOURS	8,760	HOURS	
Net Generation	652,896	MWH	7,978,011	MWH	2
Capacity Factor	98.57	%	97.84	%	
Equivalent Availability	97.55	%	97.17	%	
Output Factor	98.57	%	99.34	%	
Heat Rate	10,716	BTU/KWH	10,621	BTU/KWH	

	MWH	% of Possible	MWH	% of Possible	
Full Scheduled	0	0.00	107,101	1.31	3
Partial Scheduled	16,223	2.45	45,338	0.56	4
Full Forced	0	0.00	16,042	0.20	5
Partial Forced	0	0.00	87,616	1.07	6
Economic Dispatch	0	0.00	0	0.00	7
Possible MWH	662,400		8,155,560		8

* See 'Notes for Nuclear Units' filed with the January 2010 report.
** Gross of Power Agency

	Month of September 2010		Twelve Month Summary		See Notes*
MDC	900	MW	912	MW	1
Period Hours	720	HOURS	8,760	HOURS	
Net Generation	653,802	MWH	7,970,401	MWH	2
Capacity Factor	100.90	%	99.78	%	
Equivalent Availability	99.36	%	98.42	%	
Output Factor	100.90	%	101.12	%	
Heat Rate	10,766	BTU/KWH	10,694	BTU/KWH	

	MWH	% of Possible	MWH	% of Possible	
Full Scheduled	0	0.00	0	0.00	3
Partial Scheduled	4,127	0.64	13,520	0.17	4
Full Forced	0	0.00	105,870	1.33	5
Partial Forced	0	0.00	10,518	0.13	6
Economic Dispatch	0	0.00	0	0.00	7
Possible MWH	648,000		7,989,120		8

* See 'Notes for Nuclear Units' filed with the January 2010 report.
** Gross of Power Agency

	Month of September 2010		Twelve Month Summary		See Notes*
MDC	724	MW	732	MW	1
Period Hours	720	HOURS	8,760	HOURS	
Net Generation	429,803	MWH	4,339,671	MWH	2
Capacity Factor	82.45	%	67.71	%	
Equivalent Availability	82.45	%	66.21	%	
Output Factor	98.60	%	100.97	%	
Heat Rate	11,301	BTU/KWH	10,728	BTU/KWH	

	MWH	% of Possible	MWH	% of Possible	
Full Scheduled	0	0.00	1,644,116	25.65	3
Partial Scheduled	0	0.00	27,365	0.43	4
Full Forced	85,360	16.38	466,956	7.28	5
Partial Forced	6,151	1.18	38,913	0.61	6
Economic Dispatch	0	0.00	0	0.00	7
Possible MWH	521,280		6,410,860		8

* See 'Notes for Nuclear Units' filed with the January 2010 report.

	Month of September 2010		Twelve Month Summary		See Notes*
MDC	727	MW	730	MW	1
Period Hours	720	HOURS	8,760	HOURS	
Net Generation	327,784	MWH	4,802,169	MWH	2
Capacity Factor	62.62	%	75.05	%	
Equivalent Availability	100.00	%	94.26	%	
Output Factor	73.91	%	79.44	%	
Heat Rate	10,623	BTU/KWH	10,554	BTU/KWH	

	MWH	% of Possible	MWH	% of Possible	
Full Scheduled	0	0.00	268,017	4.19	3
Partial Scheduled	0	0.00	57,534	0.90	4
Full Forced	0	0.00	5,874	0.09	5
Partial Forced	0	0.00	34,629	0.54	6
Economic Dispatch	195,656	37.38	1,230,553	19.23	7
Possible MWH	523,440		6,398,450		8

* See 'Notes for Fossil Units' filed with the January 2010 report.
** Gross of Power Agency

	Month of September 2010		Twelve Month Summary		See Notes*
MDC	662	MW	665	MW	1
Period Hours	720	HOURS	8,760	HOURS	
Net Generation	375,273	MWH	3,849,251	MWH	2
Capacity Factor	78.73	%	66.08	%	
Equivalent Availability	93.93	%	73.95	%	
Output Factor	82.38	%	86.42	%	
Heat Rate	9,025	BTU/KWH	9,006	BTU/KWH	

	MWH	% of Possible	MWH	% of Possible	
Full Scheduled	21,118	4.43	1,214,353	20.85	3
Partial Scheduled	7,769	1.63	89,612	1.54	4
Full Forced	0	0.00	145,875	2.50	5
Partial Forced	58	0.01	70,626	1.21	6
Economic Dispatch	72,422	15.19	454,239	7.80	7
Possible MWH	476,640		5,825,400		8

* See 'Notes for Fossil Units' filed with the January 2010 report.

	Month of September 2010		Twelve Month Summary		See Notes*
MDC	693	MW	695	MW	1
Period Hours	720	HOURS	8,760	HOURS	
Net Generation	384,583	MWH	4,506,807	MWH	2
Capacity Factor	77.08	%	74.01	%	
Equivalent Availability	99.65	%	94.10	%	
Output Factor	77.08	%	78.04	%	
Heat Rate	10,366	BTU/KWH	10,779	BTU/KWH	

	MWH	% of Possible	MWH	% of Possible	
Full Scheduled	0	0.00	314,792	5.17	3
Partial Scheduled	1,750	0.35	10,164	0.17	4
Full Forced	0	0.00	0	0.00	5
Partial Forced	0	0.00	34,351	0.56	6
Economic Dispatch	112,627	22.57	1,223,379	20.09	7
Possible MWH	498,960		6,089,660		8

* See 'Notes for Fossil Units' filed with the January 2010 report.

	Month of September 2010		Twelve Month Summary		See Notes*
MDC	698	MW	702	MW	1
Period Hours	720	HOURS	8,760	HOURS	
Net Generation	360,663	MWH	4,708,563	MWH	2
Capacity Factor	71.77	%	76.54	%	
Equivalent Availability	99.53	%	97.87	%	
Output Factor	71.77	%	77.39	%	
Heat Rate	11,395	BTU/KWH	11,795	BTU/KWH	

	MWH	% of Possible	MWH	% of Possible	
Full Scheduled	0	0.00	24,920	0.41	3
Partial Scheduled	792	0.16	66,980	1.09	4
Full Forced	0	0.00	5,596	0.09	5
Partial Forced	1,568	0.31	34,311	0.56	6
Economic Dispatch	139,537	27.77	1,311,538	21.32	7
Possible MWH	502,560		6,152,440		8

* See 'Notes for Fossil Units' filed with the January 2010 report.
** Gross of Power Agency

Plant	Unit	Current MW Rating	January 2009 - December 2009	September 2010	January 2010 - September 2010
Asheville	1	191	70.87	62.25	74.89
Asheville	2	185	59.45	74.05	70.27
Cape Fear	5	144	63.73	55.83	76.23
Cape Fear	6	172	62.21	60.11	72.00
Lee	1	74	50.63	59.95	73.37
Lee	2	77	41.80	23.52	57.73
Lee	3	246	58.82	61.72	73.13
Mayo	1	727	62.45	62.62	76.33
Robinson	1	177	61.18	48.26	68.24
Roxboro	1	369	79.40	65.09	82.14
Roxboro	2	662	73.67	78.73	64.07
Roxboro	3	693	62.76	77.08	81.78
Roxboro	4	698	71.40	71.77	78.67
Sutton	1	97	39.14	25.41	50.65
Sutton	2	104	44.65	34.31	55.21
Sutton	3	403	48.01	31.91	57.67
Weatherspoon	1	48	13.92	17.46	44.54
Weatherspoon	2	48	14.93	16.46	39.20
Weatherspoon	3	75	23.59	14.16	53.34
Fossil System Total		5,190	62.52	61.79	71.72
Brunswick	1	938	97.67	102.03	75.13
Brunswick	2	920	79.50	98.57	96.90
Harris	1	900	93.90	100.90	100.55
Robinson Nuclear	2	724	104.08	82.45	56.14
Nuclear System Total		3,482	93.18	96.75	83.48
Total System		8,672	74.79	75.83	76.47

Amended SC Fuel Rule
Related to Nuclear Operations

There shall be a rebuttable presumption that an electrical utility made every reasonable effort to minimize cost associated with the operation of its nuclear generation system if the utility achieved a net capacity factor of ≥ 92.5% during the 12 month period under review. For the test period March 1, 2010 through September 30, 2010, actual period to date performance is summarized below:

Period to Date: March 1, 2010 to September 30, 2010

Nuclear System Capacity Factor Calculation (Based on net generation)

A.. Nuclear system actual generation for SCPSC test period	A =	14,515,066 MWH
B. Total number of hours during SCPSC test period	B =	5,315 hours
C. Nuclear system MDC during SCPSC test period (see page 2)	C =	3,482 MW
D. Reasonable nuclear system reductions (see page 2)	D =	3,670,437 MWH

A. SC Fuel Case nuclear system capacity factor: [(A + D) / (B + C)] * 100 = 101.7%

NOTE:
If Line Item E > 92.5%, presumption of utility's minimum cost of operation.
If Line Item E < 92.5%, utility has burden of proof of reasonable operations.

Amended SC Fuel Rule
Nuclear System Capacity Factor Calculation
Reasonable Nuclear System Reductions
Period to Date: March 1, 2010 to September 30, 2010

Nuclear Unit Name and Designation	BNP Unit # 1	BNP Unit # 2	HNP Unit # 1	RNP Unit # 2	Nuclear System
Unit MDC	938 MW	920 MW	900 MW	724 MW	3,482 MW
Reasonable refueling outage time (MWH)	1,335,783	0	0	1,644,116	
Reasonable maintenance, repair, and equipment replacement outage time (MWH)	92,661	26,651	2,368	455,543	
Reasonable coast down power reductions (MWH)	0	0	4,128	0	
Reasonable power ascension power reductions (MWH)	55,192	464	0	21,363	
Prudent NRC required testing outages (MWH)	10,237	21,332	599	0	
SCPSC identified outages not directly under utility control (MWH)	0	0	0	0	
Acts of Nature reductions (MWH)	0	0	0	0	
Reasonable nuclear reduction due to low system load (MWH)	0	0	0	0	
Unit total excluded MWH	1,493,873	48,447	7,095	2,121,022	
Total reasonable outage time exclusions [carry to Page 1, Line D]					3,670,437